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EXAMINER

LE, DIEU MINH T

ART UNIT PAPER NUMBER

2114

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24

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/401,874

Applicant(s)

ENGEL, FERDINAND

Examiner

Dieu-Minh Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 23/01/12/04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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**Part III DETAILED ACTION**

**Specification**

1. This office action is response to the RCE filed on 01/12/04. Claims 1-39 are presented for examination.

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-39 are rejected under 35 U.S.C. 102(e) as being unpatentable over Anthony Walker (EP Patent 0 909 056 A2).

**As per claim 1:**

Walker explicitly teaches:

- a method of troubleshooting (i.e., failure detection, identifying failure location, perform failure analysis, isolating failure, failure reporting capabilities) a

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network that includes a plurality of devices [abstract, fig. 1, pg. 2, lines 5-7, pg. 13, line 41-42];

- attempting communication with a target device (i.e. a network element) among plurality of device [fig. 1, pg. 2, lines 10-24, pg. 13, lines 44-49], target device having a neighbor [pg. 2. lines 57 through pg. 3, line 5, pg. 13, lines 44-49];

- if the attempt to communication with the target device failed , determining if the target device has an active neighbor by attempting to communicate with neighbor [fig. 1, pg. 2, lines 19-22, pg. 13, 50-58];

- if it is determined that the neighbor is an active neighbor, identifying the target devices as a failed device [pg. 2, lines 22-24].

As per claims 2-4:

- the method is implemented by a computer on the network (i.e., a connectivity among router, bridge, switch, and other network device via a networking environment) [fig. 1 and 6, abstract, pg. 2, lines 5-7]

- identifying an active neighbor devices [pg. 2, lines 19-24].

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- attempting communication with the identified neighbor of the target device [fig. 1, pg. 2, lines 19-22, pg. 13, 50-58];
- if attempt to communication with identified neighbor is successful, concluding that the identified neighbor is active [fig. 6, pg. 2, line 57-58, pg. 8, lines 36-40 and pg. 13, lines 46-48];
- locating a neighbor of the target device [fig. 1 and 6, pg. 2, lines 19-24].

As per claims 5-7:

Walker further explicitly teaches:

- generating a neighboring table for the network [pg. 5, lines 34-56];
- consulting the neighboring table to locate the neighbor of the target device [pg. 5, lines 34 through pg. 6, line 56];
- polling the target device [pg. 2, lines 30-35 and pg. 3, line 31, pg. 13, line 45];
- receiving a response from the target device [pg. 4, lines 1-20 and pg. 13, lines 20-27]

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- constructing the neighbor table base on the response (i.e., filter and network interface/critical route table) [pg. 4, lines 21-27 and pg. 5, lines 34-56].
- polling is performed periodically [pg. 3, line 45];
- updating the neighbor table based on the periodic polling (i.e., using and applying the OpenView Network Node Manager (NNM) and its table within) [pg. 2, lines 11-12 and pg. 4, lines 1-9].

As per claims 8-9:

Walker further explicitly teaches:

- a method of troubleshooting (i.e., **failure detection, identifying failure location, perform failure analysis, isolating failure, failure reporting capabilities**) a network [abstract, fig. 1, col. 1, lines 10-14];
- a network address of the neighbor (i.e., a connectivity among router, bridge, switch, sockets, network interfaces, and other network device via a networking environment) [fig. 1 and 6, abstract, pg. 10, lines 10-48].
- a neighboring table indexes the target device to the network address of the neighbor [i.e., using and applying the OpenView Network Node Manager (NNM) and its table within) [pg. 2, lines 11-12 and pg. 4, lines 1-9];

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- stores a Management Information Base (MIB) II table contains Network address of the neighbor and prepares the response based on the MIB II table [i.e., topology database, OpenView Network Node Manager (NNM) and its table within) [pg. 2, lines 11-12 and lines 53-54, pg. 3, lines 55-58, and pg. 4, lines 1-9].

As per claim 10:

Walker further explicitlty teaches:

- the target device comprises a router or a switch, and the neighbor comprises a router , a switch, or a computer. (i.e., a connectivity among router, bridge, switch, sockets, network interfaces, and other network device via a networking environment) [fig. 1 and 6, abstract, pg. 10, lines 10-48].

As per claims 32-33:

Walker further explicitlty teaches:

- attempting to communicate with the target device involves sending a communication to target device [fig. 1, pg. 2, lines 10-24, pg. 13, lines 44-49];
- attempting to communicate with one or more neighbors of the target device involves sending a communication to one

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or more neighbors of the target [fig. 1, pg. 2, lines 10-24, pg. 13, lines 44-49].

As per claims 11, 34-35:

These claims are similar to claims 1-10 and 32-33.

Therefore, these claims are also rejected under the same rationale applied against claims 1-10 and 32-33. In addition, all of the limitations have been noted in the rejection as per claims 1-10 and 32-33.

Walker further explicitly teaches:

- generating a neighboring table for the network [pg. 5, lines 34-56];
- consulting the neighboring table to locate the neighbor of the target device [pg. 5, lines 34 through pg. 6, line 56].

As per claims 12-20 and 36-37:

Due to the similarity of claims 12-20 to claims 1-10 and 32-33 except for an apparatus for identifying a failed device in a network instead of a method for identifying a failed device in a network; therefore, these claims are also rejected under the same rationale applied against claims 1-10. In addition, all of



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the limitations have been noted in the rejection as per claims 1-10.

Walker further explicitly teaches:

- sending a packet to the target device and waiting for a response from the target device (i.e., ping packets and network management traffic) [pg. 2, lines 30-35 and 51-56, pg. 7, lines 1-27, and pg. 10, lines 33-35]
- processor executes code to locate a neighbor of the target device [pg. 3, lines 44-48].

As per claims 21-29 and 38-39:

These claims are the same as per claims 1-10, 32-33 and 12-20, 36-37. The only minor different is that these claims are directed to a computer program stored on a computer readable medium to identifying a failed device in a network instead of the method and apparatus for identifying a failed device in a network as described in 1-10, 32-33 and 12-20, 36-37, respectively. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to realized that a machine-readable storage medium is a necessary item for such networking system, more specifically, data communication or transmission among computer devices. Since the networking system obviously needs a means for instruction or

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code means resided within the machine-readable storage medium for performing the data storing, receiving, transmitting operation capability. Therefore, these claims are also rejected under the same rationale applied against claims 1-10, 32-33 and 12-20, 36-37.

As per claims 30-31:

These claims are similar to claims 1-10 and 32-33. Therefore, these claims are also rejected under the same rationale applied against claims 1-10 and 32-33. In addition, all of the limitations have been noted in the rejection as per claims 1-10 and 32-33.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-39 are rejected under 35 U.S.C. 102(b) as being unpatentable over De et al. (US Patent 5,436,909 hereafter

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referred to as Dev).

Dev explicitly teaches the invention. Dev teaches:

- A method of troubleshooting a network that includes a plurality of devices [abstract, fig. 1, col. 1, lines 10-15]

comprising:

- attempting communication with a target device (i.e. a first network device) among plurality of device [fig. 1 and 2, col. 2, lines 38-42], target device having a neighbor (all network devices adjacent to the first network device [col. 2, lines 41-47];
- if the attempt to communication with the target device failed (i.e., first, determining if the target device has an active neighbor by attempting to communicate with neighbor [fig. 1 and 2, col. 2, lines 47-54];
- if it is determined that the neighbor is an active neighbor, identifying the target devices as a failed device (i.e., first network device lost) [col. 2, lines, 42-44].
- the method is implemented by a computer on the network [fig. 1 and 2, abstract, col. 1, lines 13-15];
- identifying an active neighbor devices [col. 2, lines 45-46].

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- attempting communication with the identified neighbor of the target device (i.e., first network device) [fig. 1 and 2, col. 2, lines 47-54];
- polling a target device (i.e., first network device) [col. 2, lines 60-61];
- communicating via data packet [col. 4, lines 64-68];
- database models and relation between models (i.e., MIB table models) [fig. 3, col. 6, lines 7-33];

This is clearly shown that Dev's teaching capabilities are corresponding to Applicant's invention.

### Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5. A shortened statutory period for response to this action is set to expired THREE (3) months, ZERO days from the date of this letter. Failure to respond within the period for response will cause the application to be abandoned. 35 U.S.C. 133.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dieu-Minh

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Le whose telephone number is (703) 305-9408. The examiner can normally be reached on Monday-Thursday from 8:30 AM to 6:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Beausoliel, can be reached on (703)305-9713. The fax phone number for this Group is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

  
**DIEU-MINH THAI LE**  
**PRIMARY EXAMINER**  
**ART UNIT 2114**

DML  
5/11/04